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45728 7590 11/12/2009 IBM ST-SVL SAWYER LAW GROUP LLP			EXAMINER	
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#### UNITED STATES PATENT AND TRADEMARK OFFICE

# BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Ex parte ROBBERT C. VAN DER LINDEN, STEFAN TOBIAS MAYR, and BRAIN S. VICKERY

Appeal 2008-005734 Application 10/648,752 Technology Center 2100

Decided: November 9, 2009

Before LANCE LEONARD BARRY, HOWARD B. BLANKENSHIP, and JAY P. LUCAS, *Administrative Patent Judges*.

BARRY, Administrative Patent Judge.

## DECISION ON APPEAL

#### STATEMENT OF THE CASE

The Patent Examiner rejected claims 1, 3-11, 13-21, and 23-36. The Appellants appeal therefrom under 35 U.S.C. § 134(a). We have jurisdiction under 35 U.S.C. § 6(b).

#### INVENTION

The invention at issue on appeal parses a structured document and generates nodes to form a hierarchical node tree representing the document. Each node that has children includes child pointers; stored in each pointer is a hint related to the child node to which the pointer points. When evaluating a query, a database management system (DBMS) navigating the node tree during query evaluation follows those pointers that contain a hint that matches a query. (Spec. 2-3.)

#### ILLUSTRATIVE CLAIM

- 1. A method for querying a structured document stored in its native format in a database, wherein the structured document comprises a plurality of nodes that form a hierarchical node tree, the method comprising the steps of:
- (a) providing at least one child pointer within at least one of the plurality of nodes in the hierarchical node tree, wherein the at least one child pointer points to a corresponding child node in the hierarchical node tree;
- (b) storing a hint within the at least one child pointer, the hint being related to the corresponding child node, wherein the at least one child pointer further comprises a node slot number of the corresponding child node; and
- (c) utilizing the hint to determine whether to navigate to the corresponding child node during query evaluation.

#### PRIOR ART

IGATA 6,853,992 B2 Feb. 8, 2005 (filed Nov. 30, 2000)

MANIKUTTY	6,836,778 B2	Dec. 28, 2004
BAILEY	2004/0243553	(filed May 1, 2003) Dec. 2, 2004 (filed May 30, 2003)
		(Hied May 50, 2005)

#### REJECTIONS

Claims 1, 3-5, 9, 11, 13-15, 19, 21, 23-25, 29, and 31-36 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Igata.

Claims 6, 10, 16, 20, 26, and 30 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Igata and Manikutty.

Claims 7, 8, 17, 18, 27, and 28 stand rejected under § 103(a) as being unpatentable over Igata and Bailey.

#### ISSUE

The Examiner makes the following findings.

With respect to Fig. 12C [of Igata], item: "PART1 0 1"; the Examiner interprets PART1 together with the arrow pointing to item: "PART2 1 2" as the child pointer claimed; wherein the PART1 corresponds to the hint claimed; and wherein, as shown in such Figure, the hint "PART1" is related to the corresponding child node ("PART2 1 2"), because "1" is included in "PART1" and is related to "PART2 1 2" ("1"in PART1 and "1" of PART2 1 2", emphasis added)." (Ans. 13.)

The Appellants argue that "the 'PART1' in FIG. 12C of Igata cannot be construed as disclosing, teaching, or suggesting the 'hint . . . relat[ing] to the corresponding child node . . . . " (Reply Br. 4.)

Application 10/648,752

Therefore, the issue before us is whether the Appellants have shown error in the Examiner's finding that Igata teaches storing a hint within a child pointer of a parent node, the hint being related to a corresponding child node and using the hint to determine whether to navigate to the corresponding child node when evaluating a query.

#### LAW

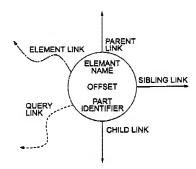
"It is axiomatic that anticipation of a claim under § 102 can be found only if the prior art reference discloses every element of the claim . . . . " *In re King*, 801 F.2d 1324, 1326 (Fed. Cir. 1986) (citing *Lindemann Maschinenfabrik GMBH v. American Hoist & Derrick Co.*, 730 F.2d 1452, 1457 (Fed. Cir. 1984)).

#### FINDINGS OF FACT (FFs)

1. Igata's "FIGS. 2A and 2B show an example structure of the hierarchical index 13." (Col. 7, 1l. 23-24.)

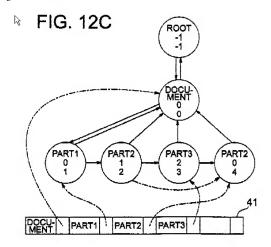
## 2. Figure 2B follows.

FIG. 2B



"As shown in FIG. 2B, each node has an element name, an offset in a row of sibling parts in the document, a part-ID for identifying a meta part, a link to a parent node (a parent link), a link to a sibling node (a sibling link), and a link to a child node (a child link)." (*Id.*, Il. 47-51.)

## 3. Figure 12C follows.



### ANALYSIS

For its part, Igata depicts parent nodes as vertically above child nodes and sibling nodes as horizontally adjacent to each other. (FF 2.) As mentioned *supra*, the Examiner reads the claimed parent node on the node labeled "PART1 0 1" in Figure 12C and the claimed child node on the node labeled "PART2 1 2." The Figure depicts the node labeled "PART1 0 1" and the node labeled "PART2 1 2" as horizontally adjacent each other (FF 3), however, rather than one vertically above the other. Therefore, we agree with the Appellants

that "node 'PART2 1 2' is not even a child of node 'PART1 0 1'.

Rather, node 'PART1 0 1' and node 'PART2 1 2' are sibling nodes . . . ." (Reply Br. 4.)

The reference also depicts child links as vertical arrows pointing downward and sibling links as horizontal arrows. (FF 2.) As mentioned *supra*, the Examiner reads the claimed child pointer on the arrow pointing from PART1 0 1 node to the PART2 1 2 node. Figure 12C depicts the arrow pointing from PART1 0 1 node to the PART2 1 2 node as a vertical arrow, however, rather than a horizontal arrow. (FF 3.) Therefore, we find that the arrow pointing from PART1 0 1 node to the PART2 1 2 node is a sibling link rather than a child link.

Igata explains that each node has an element name, an offset in a row of sibling parts in the document, and a part-ID for identifying a meta part. (FF 2.) As mentioned *supra*, the Examiner explains "that 'PART1' is related to the corresponding child node ('PART2 1 2'), because 'I' is included in 'PART1' and is related to 'PART2 1 2' ('I' in PART1 and 'I' of PART2 1 2', emphasis added)." (Answer 13.) Based on Igata's explanation of Figure 2B (FF 2), we also agree with the Appellants that "for the node 'PART1 0 1', 'PART1' is the element name of the document part corresponding to the node" (Reply Br. 3), and "[f] or the node 'PART2 1 2', . . . 'I' is the offset in the document for the document part corresponding to the node . . . . (*Id*.) Therefore, we also agree with them that "the 'I' in node "PART1 0 1' has absolutely nothing to do with the 'I' in node 'PART2 1."" (*Id*. at 4.)

Application 10/648,752

The Examiner does not allege, let alone show, that the addition of Manikutty or Bailey cures the aforementioned deficiency of Igata.

### CONCLUSION

Based on the aforementioned facts and analysis, we conclude that the Appellants have shown error in the Examiner's finding that Igata teaches storing a hint within a child pointer of a parent node, the hint being related to a corresponding child node and using the hint to determine whether to navigate to the corresponding child node when evaluating a query.

### DECISION

We reversed the rejections of claims 1, 3-11, 13-21, and 23-36.

## REVERSED

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